in iron and steel was observed by him several years ago, but he believed that it was not generally credited. It was a source of error in determining carbon by the colorimetric method. He proposed to make further investigation by analyses, and to communicate his results.

The Committee on the Michaux Legacy reported that they had purchased and presented to the Fairmount Park Commission, for Horticultural Library, the North American Sylva, by Michaux and Nuttall.

Prof. Cope moved the appointment of a committee to examine and report on the merits of his paper, reported on adversely to its publication at a previous meeting. After discussion of the motion by Messrs. Cope, Frazer, Briggs and LeConte, the consideration of the subject further was, on motion of Dr. LeConte, postponed to the next meeting.

Pending nominations Nos. 852 to 856 were read and the meeting was adjourned.

Stated Meeting, April 19th, 1878.

Present, 15 members.

Vice-President, Mr. E. K. Price, in the chair.

A letter acknowledging the receipt of Nos. 96, 97, 98, was received from the Royal Academy at Amsterdam, dated Oct. 20, 1877.

Letters of envoy were received from the same, Nov. 13, 1877; the Royal Zoological Society, Amsterdam, Feb. 1, 1878; the Society at Marburg, Jan. 1; and the Royal Observatory at Bruxelles, Oct. 1, 1877.

A letter was received from the Fairmount Park Commissioners acknowledging the gift of the Michaux and Nuttall Flora Americana, for the Park Library, dated April 13,1878.

Donations for the Library were received from the Academies at St. Petersburg, Berlin, Amsterdam, Bruxelles, Rome and Philadelphia; the Zoological Society at Amsterdam; the German Geological and Horticultural Societies in Berlin;

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the Societies in Ulm, Cassel and Marburg; M. Henri de Saussure; the Royal Institute at Luxembourg; the Observatories at Oxford, Bruxelles and Cincinnati; the Geological Commercial Society at Bordeaux; the Geographical and Meteorological Societies, Victoria Institute and London Nature; the Royal Society at Edinburgh; the Royal Geological Society at Dublin; the Boston Natural History Society; American Antiquarian Society; Prof. James Hall; Pennsylvania Magazine of History and Biography; Mr. M. Russell Thayer of Philadelphia; Mr. E. A. Barber and Prof. J. J. Sylvester of Baltimore.

Mr. Lesley read extracts from a letter from Prof. E. Desor, of Neufchätel, respecting the discovery of "pierres à ècuilles," or rocks with cup sculptures, in the vicinity of Lyons, in Dauphiné, Thuringen, the Altmarck, Pomerania, Mecklenburg, Hanover, Bohemia, and Lower Aus-

tria.

"In Sweden where they go by the name of *Elfenstenar* people at this day carry to them all sorts of offerings and anoint them with lard against diseases (smorja sten for

sjukdom) (Siegthum).

"But what is particularly interesting is the discovery recently made of similar cups on the walls of the old churches of Northern Germany, even when the walls are built of bricks, as is the case on three of the old churches of Greifswald." [Sketches were shown of several brick courses with groups of cups.*] "It is another instance of that habit of the Christian apostles to borrow all sorts of practices from heathendom and apply them to their own cultus."

Mr. Franklin Platt communicated a section of the Palæozoic rocks of Blair Co., Pa., measured and compiled during the last season's work of the Geological Survey, by Mr. Sanders.

Prof. Frazer described pot holes and Indian cup sculpture on the shore and island rocks of the Susquehanna River: and Dr. LeConte described the pot holes produced by wave movements on the north shore of Lake Superior.

Napichen and Rillen on the Churches of Griefswald, by Dr. Fiedel.

Dr. LeConte communicated two more lists:

1. List of Coleoptera found in the Lake Superior region, by H. G. Hubbard and E. A. Schwarz.

2. Contribution to a list of the Coleoptera of the Lower Peninsula of Michigan, by the same.

Dr. Horn communicated two papers:

1. Synopsis of the Colydiida of the U.S.

2. Revision of the species of the sub-family Bostrichidæ of the U.S.

Prof. Frazer threw upon a screen, by means of Mr. Holman's calcium light with microscope, magnified reflections of the pits in tin foil produced by the stylus of a phonograph, and showed by a discussion of their shapes that different vowels and vowels of different time lengths had different and constant characteristic marks visible to the eye, that these marks were single, double and triple, always connected in the same manner and order. Even the resolution of diphthongs appeared possible. His experiments were made with the assistance of Mr. Plush of Philadelphia, and on his phonograph.

Prof. Frazer also recorded a new use of the "Edison transmitter" for measuring amounts of pressure by means of the

galvanometer.

Pending nominations, Nos. 852 to 856 were read, and on motion the regular election of members was postponed to the next meeting.

And the meeting was adjourned.

Stated Meeting, May 3d, 1878.

Present 13 members.

Vice-President, Mr. Fraley, in the chair.

Photographs for the Album were received from Prof. F. A. March, of Easton, Pa; Prof. T. M. Drown, of Easton, Pa: Prof. W. C. Cattell, President of Lafayette College, Easton, Pa.; Prof. Thomas Conrad Porter, of Easton, Pa.; and President F. A. P. Barnard, of Columbia College, New York City, with a letter from the same.